chris vandevelde

chris.vandevelde@uwaterloo.ca
226-606-1829

2964 Keynes Crescent
Mississauga, ON, Canada.
L5N 3A1

summary of qualifications

- Moderate programming experience in **Python**, **Javascript**, **Java**, **HTML**, **CSS**, and SQL.
- Strong interest in **Machine Intelligence** and **Human-Computer Interaction**.
- Previous programming experience in Node.js, Perl, PHP, C++, bash scripting and ColdFusion.
- Experience with Adobe Photoshop, Inkscape, Microsoft Office, and in Mac, Linux, and Windows environments.
- Bilingual in **English** and **French**.

experience

trendradius
Kitchener, Ontario
Software & Machine Learning Developer
July 2014 - Present (Full-Time)

- Development on a web-based application using **Node.js**, **Express**, and **MongoDB**, a front-end Javascript application based on **Backbone.js** and **Twitter Bootstrap**, and a backend processing application written in Java.
- Created intelligent **sentiment analysis** tool in Java using OpenNLP and SentiWordNet, and **feed-forward neural network** to suggest matches across text-based content collections.
- Led efforts to ensure **Continuous Integration** and Deployment across products, set up Jenkins CI server and testing using Mocha.js and JUnit, consolidated build processes using NPM and Maven.

canopy labs
Toronto, Ontario
Data-Mining & Machine Learning Developer
April 2013 - August 2013 (Full-Time)

- Fixed bugs and added features to the full stack of the Canopy Labs customer analytics platform throughout a series of inter-related applications.
- Worked in a variety of environments (both new and familiar) including Python, PHP, C++, JavaScript, HTML5/CSS, R, shell scripting on both Mac and Linux operating systems.
- Worked with a variety of software development tools including Git, FogBugz, JIRA, Scons, and Selenium.

square
San Francisco, California
Android Developer
Jan 2012 – April 2012 (Full Time)
Sept 2012 – Dec 2012 (Full Time)

- Helped develop and build features, and identify and fix bugs across both Square's Wallet and Register **Android** applications.
- Coded across the entirety of the application, from layout files and UI to helper libraries to backend logic, home-screen app widgets and more.
- Contributed to maintaining software quality via tests using Android testing frameworks Robolectric and Robotium.
- Worked primarily on OS X using **IntelliJ IDEA**, along with **git** and both **ant** and **maven** for building.

upverter
Toronto, Ontario
Blacksmith/Mad Scientist
May 2011 – August 2011 (Full Time)

- Contributed features and bug-fixes to the development of an HTML5 Canvas and Python web application for Electronic Circuit Design, as well as a community-centered project showcase and parts library.
- Learned multiple new languages and APIs over four months including **Python**, **Protocol Buffers**, **HTML5 Canvas** and **Google Closure**.
- Developed a robust Node.js-based standalone script that used the existing Javascript & HTML5 Canvas rendering process, and batch export images to PNG.
- Also contributed to various side projects including **Arduino** and **Android** connections over USB, MIDI signal generation and Amazon EC2 setup.

ontario institute for cancer research
Toronto, Ontario

Genome Software Developer — May 2010 – December 2010 (Full Time)

- Bug-fixing, feature addition and updates in code & architecture on GBrowse, an open-source web application built in Perl, HTML, CSS & Javascript and a variety of SQL-compliant databases.
- Built and tested from scratch a custom data-sharing system onto the existing application.
- Worked in an entirely Linux-based development environment using Subversion.
- Additionally developed a layout algorithm for sorting glyphs onto the theoretically smallest space for the project.

education

university of waterloo
Waterloo, Ontario

Bachelor of Applied Sciences in Systems Design Engineering — September 2008 – June 2014

Relevant Courses

- Pattern Recognition – Methods for classifying and intepreting measured data in groups.
- Machine Intelligence – Intelligent systems, artificial intelligence techniques.
- Simulating Neurobiological Systems – Neural computation, modelling techniques.
- Biomedical Measurement & Signal Processing – EMG, EKG, EEG signals.
- Control Systems – Controls engineering, systems theory, PID contorl and action.
- Image Processing – Analyzing, adjusting, and filtering image data.
- Data Structures & Algorithms – Data structure and algorithm characteristics and use.
- *Various core courses* – Design process, creating unique solutions based on end-user needs, general systems.

clarkson secondary school
Mississauga, Ontario

Ontario Secondary School Diploma — June 2007

French Immersion Diploma — June 2007

awards

university of waterloo
Waterloo, Ontario

President's Scholarship — September 2008

clarkson secondary school
Mississauga, Ontario

Black Charger Award (800+ hours of extra-curricular involvement) — September 2007

Six Principal's Reception awards (awards for school commitment) — September 2006 – June 2008

activities & interests

- Drummer, Various jazz bands & combos, Mississauga & Waterloo, since January 2003
- Interested in cognitive science, human-computer interaction, and artificial intelligence. Maintains an online notebook at http://blog.chris.vandevel.de